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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/780,614

02/19/2004

Yechiel Cohen

27438

3167

7590

04/21/2006

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EXAMINER

MACPHERSON, MEOGHAN E

ART UNIT

PAPER NUMBER

3732

DATE MAILED: 04/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

6

Office Action Summary	Application No. 10/780,614	Applicant(s) COHEN, YECHIEL	
	Examiner Meaghan E. MacPherson	Art Unit 3732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on March 2, 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 4 and 13-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Priority

1. Acknowledgement is made of applicant's claim for priority under 35 U.S.C. 119(a)-(d) based upon an application filed in Israel on February 20, 2003. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Election/Restrictions

2. Applicant's election **without** traverse of Group I (claims 1-3, 5-12) in the reply filed on March 2, 2006 is acknowledged.

Claims 4 and 13-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim.

Drawings

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "2a" has been used to designate both the handle and the slender neck.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "6b" (another section of the transmission), "16" (shaft of the transmission), "17" and "18" (bevel gears), "21" (threads of the knob), "26" (knob), and "35" (threaded nut).

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

4. The disclosure is objected to because of the following informalities: On page 5, lines 2 and 4, reference element "2a" is designated as being drawn to both the handle and the slender neck. Also, on page 8, line 17 the rotating knob is designated as being drawn to reference element "26", which is not labeled in the drawings. However, it is clear to the Examiner from Figures 1 and 3 that reference element "20" not "26" relates to the knob. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Logé et al (US Patent No. 5,924,864) in view of Shibata'789 (US Patent No. 5,074,789) in view of Patterson et al (US Patent No. 5,295,831).

Logé et al disclose a dental handpiece comprising a housing 3 of a size and configuration to be conveniently graspable by a user, a tool holder 5 carried by the housing, a dental tool 6 being of a size and configuration enabling it to be received in the mouth of the patient and used for performing an operation involved in a dental treatment of the patient, a rotary drive 7 for rotating the tool holder and the dental tool held within, and a transmission system coupling the rotary drive to the dental tool characterized in that it further comprises a torque limiter for limiting the torque applied by the rotary drive to the dental tool (col. 1, lines 13-15; col. 1, line 48-col. 2, line 25; col. 3, lines 6-14, and 39-48; col. 4, lines 5-22,; col. 4, line 61-col. 5, line 56; col. 6, lines 19-53; col. 6, line 57-col. 7, line 3; col. 7, lines 10-14, and 30-54; col. 8, lines 1-6, 16-20, 39-48, and 52-54; col. 8, line 58- col. 9, line 2; col. 9, lines 23-36, and 42-48; col. 10, lines 29-38; col. 11, lines 5-20, and 40-46; col. 11, line 60-col. 12, line 2; see Figure 1). Logé et al also disclose that the torque limiter is included within the housing between the rotary drive and the tool holder, is presettable to limit the torque to be transmitted, and is a bellevielle-spring type overload coupling (see Figure 1). Logé et al further disclose that the rotary drive is an electrical motor drive. Logé et al disclose a dental handpiece that shows the limitations as described above except for a tool clamping device.

Shibata'789 teaches a dental handpiece with a tool clamping device carried by the housing of the handpiece (col. 2, lines 34-68; col. 3, lines 37-54; col. 3, line 65-col. 4, line 66; see Figures 1 and 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dental handpiece of Logé et al to create a tool retention mechanism for strongly holding a dental tool when excessive forces is applied and for providing a means of easily releasing a dental tool from the handpiece.

Logé et al in view of Shibata'789 disclose a dental handpiece that shows the limitations as described above except for a dental tool with a driving tip.

Patterson et al teach a driving tool 210 which includes a driving tip 214 for engaging the head of a fastening member to be fixed by rotation within the patient's mouth and a mounting shaft 226 at the opposite end receivable within a clamping device (col. 1, lines 7-11; col. 2, lines 59-64; col. 3, lines 8-10; col. 4, line 50-col. 5, line 2; see Figure 3). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dental handpiece of Logé et al in view of Shibata'789 to effectively engage a dental implant component during the course of dental treatment of a patient.

Regarding claims 7 and 8, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize a coil-spring overload coupling or a torsion-bar overload coupling, since the Examiner takes Official notice of the equivalence of bellevielle-spring type overload couplings, coil-spring type, and torsion-bar type overload couplings for their use in the torque limiter art and the selection of any of these known equivalents would be within the level of ordinary skill in the art.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logé et al in view of Shibata'789 in view of Patterson et al as applied to claim 9 above, and further in view of Ikeda et al (US Patent No. 4,208,555). Logé et al in view of Shibata'789 in view of Patterson et al disclose a dental handpiece that shows the limitations as described above except for the torque limiter interrupting the electrical circuit.

Ikeda et al disclose an electrically driven tool in which the torque limiter interrupts the electrical circuit to the motor drive when the applied torque exceeds a predetermined value (col.

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1, lines 2-4 and 39-42; col. 2, line 45-col. 7, line 62; see Figures 1 and 25-27). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dental handpiece of Logé et al in view of Shibata'789 in view of Patterson et al to create an electrically driven handpiece whose motor drive would effectively stop when an exceedingly high torque value was placed upon the drill tool, thereby creating a safer treatment area for both doctor and patient as well as preserving the dental tool.

8. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logé et al in view of Shibata'789 in view of Patterson et al as applied to claim 1 above, and further in view of Kukla et al (US Patent No. 5,626,474). Logé et al in view of Shibata'789 in view of Patterson et al disclose a dental handpiece that shows the limitations as described above except for a manual drive.

Kukla et al disclose a manually operated dental implant torque wrench (a manually driven rotary drive) (col. 1, lines 6-10, and 20-30; col. 2, lines 12-27; col. 3, lines 26-46; col. 4, lines 3-7, 25-27, and 38-50; see Figures 1 and 4-6). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dental handpiece of Logé et al in view of Shibata'789 in view of Patterson et al to provide greater control over the rotary drive and thereby the applied torque of the handpiece as compared to electrically driven handpieces.

9. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Logé et al in view of Shibata'789 in view of Patterson et al as applied to claim 1 above, and further in view of Werly et al (US Patent No. 5,178,536). Logé et al in view of Shibata'789 in view of Patterson et al disclose a dental handpiece that shows the limitations as described above except for a light source and optical fiber.

Werly et al teach a dental handpiece comprising a light source and an optical fiber 6. Werly et al teach that one end of the optical fiber is adjacent to the light source and an opposite end is located to illuminate the region of the patient's mouth at which the operation is being performed (col. 1, line 48-col. 2, line 10; col. 2, lines 36-46; col. 6, lines 36-38; see Figure 1). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the dental handpiece of Logé et al in view of Shibata'789 in view of Patterson et al to create a handpiece which enhanced the precision of a dental procedure.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 4,507,085 to Mosimann et al.

US Patent No. 4,874,314 to Fleer et al.

US Patent No. 5,158,458 to Perry.

US Patent No. 5,549,474 to Cohen.

US Patent No. 6,206,696 to Day.

US Patent No. 6,443,731 to Kuhn et al.

US Patent No. 6,942,485 to Richard.

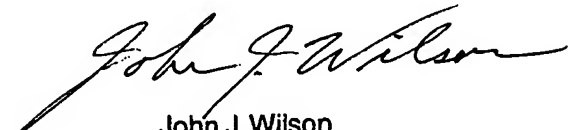
11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Meaghan E. MacPherson whose telephone number is (571)-272-5565. The examiner can normally be reached on Mon-Fri 9am-5pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Shaver can be reached on (571)-272-4720. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Meaghan E. MacPherson


John J. Wilson
Primary Examiner